

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-19. (Canceled)

20. (Currently amended) A semiconductor device comprising:

a first substrate supporting a first insulating layer with a contact hole defined therein, and a first conductive material filling in the contact hole in the first insulating layer and protruding above a surface of the first insulating layer;

a second substrate supporting a second insulating layer with a contact hole defined therein, and a second conductive material filling in the contact hole in the second insulating layer; and

wherein the first conductive material that fills in the contact hole in the first insulating layer and the second conductive material that fills in the contact hole in the second insulating layer are solid-state-bonded to each other so as to directly contact one another in a bonded state with no intermediate element therebetween.

21. (Previously presented) The semiconductor device of claim 20, wherein the second conductive material filling in the contact hole in the second insulating layer protrudes above a surface of the second insulating layer.

22. (Previously presented) The semiconductor device of claim 20, wherein the first and second conductive materials are of the same material.

23. (Previously presented) The semiconductor device of claim 20, wherein concave surfaces of the respective first and second conductive materials are bonded to one another so as to contact each other.

24. (Previously presented) The semiconductor device of claim 20, wherein a gap or clearance is defined between the first and second insulating layers adjacent an area where the conductive materials are solid-state-bonded to one another.